Development of the test manufacturing method for *kokuto* (non-centrifuged cane sugar) with high reproducibility

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Abstract

*Kokuto* is produced from sugar cane juice. This sugar cane juice is concentrated and cooled off, and then *kokuto* is made. The quality of *kokuto* is greatly influenced by the production conditions. It is usually produced on a small scale by manual labor, so its quality is not stable. It is necessary to make *kokuto* with a stable quality in order to evaluate its characteristics in terms of the sugar cane from which it is derived. Therefore, we developed an examination manufacturing method for *kokuto* production with high reproducibility. This method uses finish-heating and cooling-agitation devices. Sugar cane syrup (Brix 50) is heated to more than 130°C (or 125°C for 10 minutes) using the finish-heating device. The syrup is then cooled and agitated until cloudy, using the cooling-agitation device. Using this equipment, *kokuto* is produced stably. The coefficient of variation of water content was 0.06-0.19 and that of water activity was 0.01-0.02.

Keywords: Finish-heating, Cooling with agitation, Kokuto production